

## **REMARKS**

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested. Upon entry of this amendment, claims 39, 51, 53 and 59 are amended. Thus, claims 39-64, 78 and 79 remain pending with claim 39 being independent. No new matter has been added.

### ***Rejections Under 35 U.S.C. §102(b)***

Claims 39-42, 44-47, 49, 55 and 58 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Jarrett et al. (U.S. 4,737,247).

Applicants submit that the claims as now pending are allowable over the cited prior art. Specifically, amended independent claim 39 recites a method for electrolytic production of aluminium metal from an electrolyte comprising aluminium oxide, the method comprising controlling and maintaining the temperature of an electronic active surface of each of the anode and the cathode at a level different from the level of the surrounding electrolyte by active or passive cooling and/or active or passive heating, wherein the temperature of the active surface of the anode is colder than that the temperature of the active surface of the cathode.

The cited prior art fails to disclose or render obvious such a method. In particular, Jarrett discloses an apparatus and method for supporting and positioning inert electrodes in electrolytic reduction cells for the production of aluminum. Additionally, on page 3 of the August 5, 2010 Office Action, the Examiner asserts that the temperature of the active surface of the electrodes in Jarrett is inherently controlled and maintained at a level different from that of the surrounding electrolyte. However, Applicants submit that even assuming that the Examiner's position is correct, Jarrett fails to expressly disclose that the temperature of the active surface of the anode is colder than that the temperature of the active surface of the cathode.

Moreover, Jarrett also fails to inherently disclose this element. The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing

described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999); *see also* MPEP §2112.

Applicants submit that there is no evidence in Jarrett that the temperature of the active surface of the anode is colder than the temperature of the active surface of the cathode. Therefore, Applicants submit that Jarrett fails to disclose each element of independent claim 39.

Moreover, Applicants submit that there is no reasoning to modify Jarrett such that it would have rendered independent 39 obvious. Therefore, Applicants submit that independent claim 39 and its dependent claims are allowable over the cited prior art.

#### ***Rejections Under 35 U.S.C. §103(a)***

Claims 48, 50-54, 57, 59, 60, 62-64, 78 and 79 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Jarrett, as applied to claim 46.

Applicants submit that since claim 46 is dependent from independent claim 39 it is allowable for the reasons set forth above.

Claims 43, 56 and 61 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Jarrett, as applied to claim 46 and further in view of Brown (U.S. 4,678,578).

Applicants submit that since claims 43, 56 and 61 are dependent from independent claim 39, and since Brown fails to overcome the deficiencies of Jarrett, each of these claims is allowable for the reasons set forth above.

#### ***Conclusion***

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be allowed, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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